

# Achieve the **highest-quality,** solvent-free product

## Vacuum Desolventizer Stripper™ (VDS)



## Crown's wide range of Drying & Desolventization technologies is now even larger.

Achieve a high-quality, solvent-free product when you partner with Crown for drying and desolventization. As a leader in oilseed extraction for 70 years, Crown provides the technical expertise, guidance and proven technologies to improve current processes and develop new products. With Crown's Global Innovation Center and state-of-the-art pilot plant, you can test evaporation of water or solvent using a full range of drying and desolventization equipment, including the continuous, indirect vacuum desolventizing by Crown's new Vacuum Desolventizer Stripper.

Crown offers a confidential, real-world environment for identifying your best drying and desolventization options. Choose Crown's superior innovation, equipment, and aftermarket support to maximize product quality and yield, more sustainably and cost-effectively.



# For every application, a proven solution

Use Crown's expertise & Innovation Center to determine your optimal solution for maximizing product yield and minimizing process costs.



## NEW! Vacuum Desolventizer Stripper (VDS)

Continuous indirect vacuum drying or desolventization for temperature sensitive products. Low operating temperature.

### Benefits:

- Minimizes product denaturation and discoloration
- Continuous and scalable
- Lowest steam consumption
- First in, first out
- Full solvent recovery
- Smaller footprint: desolventizer and stripper are built into one unit (not 2 separate pieces)



## Vertical Flash Dryer

For temperature sensitive products where minimum heat input is desired, maintains particle size with less energy expenditure.

### Benefits:

- Preserves particle size
- Energy efficient, low operating cost
- Great for water wet products, handles input products with up to 90% moisture content
- Direct contact pneumatic conveying
- Minimal product denaturation and discoloration
- Compact



## Milling Flash Dryer

For applications where a fine, end product is desired.

### Benefits:

- Great for water wet products, handles products with up to 90% moisture content
- Direct contact pneumatic conveying, no moving parts in contact with material
- Fine end product desired
- Minimal product denaturation and discoloration
- Compact

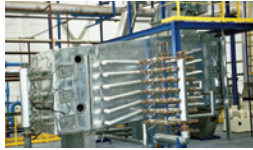


## Flash Desolventization System (FDS) *Primary Drying Step*

Direct contact system with full solvent recovery and very short residence times (a few seconds).

### Benefits:

- Short residence time and full solvent recovery
- Minimal product denaturation and discoloration
- Applicable for solvent laden materials
- Direct contact pneumatic conveying dryer



## Down Draft Desolventizer (DDD) *Primary Drying Step*

For larger particles that require extended residence times for drying, gentle heat treatment of the products.

### Benefits:

- Suitable for solvent laden products (oilseed proteins, white flakes, etc.)
- Minimal breakage of end product
- Minimal product denaturation and discoloration
- Compact, indirect dryer
- Low electrical and steam consumption



## Vacuum Stripper *Secondary Drying Step*

Provides the extended residence time at conditions to fully desolventize products without thermal degradation.

### Benefits:

- Operates under vacuum to preserve product quality (protein & color)
- Add stripping agents to achieve low ppms (if needed)
- Ability to vary operating conditions to produce several products
- Repeatable results
- Can follow any primary dryer

Plant Based Proteins | Hemp/CBD | Food/Beverage | Nutraceuticals/Botanicals/ Pharmaceuticals | Specialty Chemicals

Argentina | Brazil | China | Germany | Honduras | Mexico | Netherlands | Russia | United Kingdom | United States

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